

REMARKS

Claims 3, 7-8, 15-16, 18-23, 25 and 32-40 are allowed.

Claims 5-6, 13-14, 17, 24 and 26-31 stand rejected as obvious over Perlov in view of Lee.

A. Claims 5-6 and 13-14.

Claims 5 recites that “at least one of the annular flaps includes a notch positioned and configured to reduce downward load transmitted from at least one of the chambers through the annular flap of the flexible membrane to the main portion so as to reduce compressions in the main portion.” Claim 13 includes a similar limitation, although it recites “annular portions” rather than “annular flaps”.

The Examiner argues that claims 5 and 13 recite an intended use, and therefore do not differentiate over the prior art. As discussed below, the Examiner’s position lacks legal support.

First, the claim language noted above is not a statement of intended use. Rather, the claim language is a statement of how the parts of the apparatus interact. Statements of how the parts of the apparatus interact are entitled to patentable weight.

The Examiner cites to MPEP 2114, presumably relying upon *Ex parte Masham*, 2 USPQ.2d 1647 (Bd. Pat. App. & Inter. 1987). In *Ex parte Masham*, the intended use was the location of the structure (the mixing means) with respect to the material being worked upon (the developer material). In contrast, in the present application, the claim language noted above does not recite the location of the structure with respect to the material being worked upon.

Second, functional limitations are now entitled to patentable weight. “A patent applicant is free to recite features of an apparatus either structurally or functionally.” *In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ.2d 1429, 1432 (Fed. Cir. 1997). “There is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims.” *In re Swinehart*, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971).

Since neither Perlov nor Lee teach a notch positioned and configured to reduce downward load transmitted through the annular flap, claims 5 and 13, and claims depending therefrom should be allowable.



B. Claims 17, 24 and 30-31

Claims 17, 24 and 30-31 recite "the inner annular portion including a notch."

The Examiner states that the test for obviousness is "what the combined teachings of the references would have suggested to those of ordinary skill in the art."

However, this does not eliminate the burden on the Examiner to establish a *prima facie* case of obviousness. "The initial burden is on the Examiner to provide some suggestion of the desireability of doing what the inventor has done." MPEP 2142.

In addition, "the mere fact that the references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desireability of the combination." *In re Mills*, 916 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990).

In this case, the Examiner has not provided a motivation to provide a carrier head having a outer annular portion and an inner annular portion, with the inner annular portion including a notch.

The Examiner argues that it would have been obvious to provide Lee's notch in Perlov's annular flap "in order to minimize distortion of the flexible membrane." However, the Examiner's reason only provides a motivation to add Lee's notch to the outer annular flap of Perlov's membrane. The Examiner's reason does not provide a motivation to add Lee's notch to the inner annular flap.

This is because in Perlov the length of the inner annular flap constrains the outward expansion of the flexible membrane and prevents it from assuming a spherical shape. The addition of a notch to the inner annular flap does not change the length of the flap, and does not improve the capacity for Perlov's membrane to minimize distortions away from the ideal spherical shape. Thus, a person of ordinary skill would understand that adding Lee's notch to Perlov's inner annular flap would not minimize distortions of the flexible membrane.

Since the Examiner has not set forth a motivation to modify to references to make the claimed subject matter, the Examiner has not made a *prima facie* case of obviousness. Therefore, claims 17, 24 and 30-31 should be allowed.

C. Claims 26-31

Claims 26 recites that "at least one of the annular flaps includes a notch adapted to allow

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the at least one of the annular flaps to flex when the pressure is unequal in adjacent pressurizeable chambers.” Claims 28 and 30 include similar limitations, although they recite “annular portions” rather than “annular flaps”. Claim 31 recites that the inner annular portion includes a notch adapted to allow the inner annular portion to flex.

The Examiner did not address these limitations in the prior office action.

First, Applicant notes that this claim language in claim 26 of “a notch adapted to allow the at least one of the annular flaps to flex when the pressure is unequal in adjacent pressurizeable chambers” is not a statement of intended use. Rather this claim language describes how the parts of the apparatus act, and therefore is entitled to patentable weight as discussed above.

Second, claims 26, 28 and 30-31 recite that the annular flaps can flex. In contrast, Lee’s wall 276 is rigid (as shown in Figure 15a, the wall 276 does not bow outwardly when the pressure inside chamber 278 increases).

In sum, Lee and Perlov, either singly or in combination, do not teach or suggest a notch adapted to allow the annular portion to flex as recited by claim 31, and in particular do not teach or suggest a notch adapted to allow an annular portion or flap to flex when the pressure is unequal in adjacent pressurizeable chambers as recited by claims 26, 28 or 30. Thus, claims 26, 28 and 30-31, and the claims depending therefrom, should be allowable.

Respectfully submitted,

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